CLAIMS

What is claimed is:

1. A light concentrating dental tool apparatus for use with a curing lamp, the apparatus comprising: an elongate handle defining a longitudinal axis thereof; and a light transmissive utility element at one end of the handle, the utility element providing an outwardly facing, light receiving, top surface, and a downwardly converging cone-shaped body, the body terminating with an integral workpiece adapted for moving a matrix band; the workpiece providing a light disbursing surface enabled for directing light outwardly therefrom for curing a dental resin; the light disbursing surface providing a downwardly directed curved portion; the workpiece defining an axis of symmetry forming an angle of between 103 and 121 degrees with said longitudinal axis.
2. The apparatus of claim 1 wherein the angle between the axis of symmetry and the longitudinal axis is approximately 112 degrees.
3. The apparatus of claim 1 wherein the handle provides a receiving surface and the utility element provides a corresponding insertion surface, the surfaces enabled for engaging and disengaging the utility element with the handle, the utility element enabled, when engaged with the receiving surface of the handle, for selective angular positioning of the axis of symmetry with the longitudinal axis of the handle.
4. The apparatus of claim 3 wherein the receiving surface and the insertion surface are correspondingly tapered.
5. A light concentrating dental tool apparatus for use with a curing lamp, the apparatus comprising: an elongate handle defining a longitudinal axis thereof; and a light transmissive utility element at one end of the handle, the utility element providing an outwardly facing, light receiving, top surface, and a downwardly converging cone-shaped body, the body terminating with an integral workpiece adapted for moving a matrix band; the workpiece providing a light disbursing surface enabled for directing

light outwardly therefrom for curing a dental resin; the light disbursing surface providing a downwardly directed flat portion and a downwardly curved portion in mutually opposing juxtaposition; the flat and the curved portions defining a common axis of symmetry forming an angle of between 59 and 77 degrees with said longitudinal axis.

6. The apparatus of claim 5 wherein the angle between the axis of symmetry and the longitudinal axis is approximately 68 degrees.
7. The apparatus of claim 5 wherein the handle provides a receiving surface and the utility element provides a corresponding insertion surface, the surfaces enabled for engaging and disengaging the utility element with the handle, the utility element enabled, when engaged with the receiving surface of the handle, for selective angular positioning of the axis of symmetry with the longitudinal axis of the handle.
8. The apparatus of claim 7 wherein the receiving surface and the insertion surface are correspondingly tapered.
9. A light concentrating dental tool apparatus for use with a curing lamp, the apparatus comprising: an elongate handle defining a longitudinal axis thereof; and a pair of light transmissive utility elements integral with the handle at opposing ends thereof, the utility elements each providing an outwardly facing, light receiving, top surface, and a downwardly converging cone-shaped body, the body terminating with an integral workpiece adapted for moving a matrix band; the workpiece providing a light disbursing surface enabled for directing light outwardly therefrom for curing a dental resin; the light disbursing surface providing a downwardly directed flat portion and a downwardly curved portion in mutually opposing juxtaposition; the flat and the curved portions defining a common axis of symmetry forming an angle, at one end of the handle, of between 59 and 77 degrees with said longitudinal axis, and at the other end of the handle, of between 103 and 121 degrees with said longitudinal axis.
10. The apparatus of claim 7 wherein the angle between the axis of symmetry and the longitudinal axis at the one end is approximately 68 degrees and at the other end is approximately 112 degrees.

11. The apparatus of claim 7 wherein, at each end, the handle provides a receiving surface, each of the utility elements providing a corresponding insertion surface, the surfaces enabled for engaging and disengaging the utility elements with the handle, each of the utility elements enabled, when engaged with one of the receiving surfaces of the handle, for selective angular positioning of the axis of symmetry with the longitudinal axis of the handle.
12. The apparatus of claim 11 wherein the receiving surfaces and the insertion surfaces are correspondingly tapered.
13. A light concentrating dental tool apparatus for use with a curing lamp, the apparatus comprising: an elongate handle defining a longitudinal axis thereof; and a light transmissive utility element at one end of the handle, the utility element providing an outwardly facing, light receiving, top surface, and a downwardly converging hyperbolic outer surface, the utility element terminating with a downwardly depending workpiece adapted for moving a matrix band; the workpiece providing a light disbursing surface enabled for directing light outwardly therefrom for curing a dental resin; the light disbursing surface providing a downwardly directed curved portion; the workpiece defining an axis of symmetry collinear with said longitudinal axis.